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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/589,401

06/08/2007

Uwe Skultety-Betz

10191/4512

8231

26646 7590 10/02/2008  
KENYON & KENYON LLP  
ONE BROADWAY  
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EXAMINER

BYTHROW, PETER M

ART UNIT

PAPER NUMBER

3662

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DELIVERY MODE

10/02/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/589,401	<b>Applicant(s)</b> SKULTETY-BETZ ET AL.	
	<b>Examiner</b> Peter M. Bythrow	<b>Art Unit</b> 3662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) 1-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 18-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____.  | 6) <input type="checkbox"/> Other: ____.                          |

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Information Disclosure Statement***

2. The information disclosure statements filed 08/14/2006 have been entered and considered. Initialed copies of the PTO-1449 by the Examiner are attached.

### ***Oath/Declaration***

3. The oath filed on 06/08/2007 is acceptable.

### ***Drawings***

4. The drawings filed on 08/14/2006 are acceptable.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 18-20, 25, 28, 29, 32 are rejected under 35 U.S.C. 102(b) as being anticipated by Wollny (US 5680048).

**As to Claims 18 and 28**, Wollny discloses a radar device having a radar sensor that generates a first detection signal for penetrating a medium to be tested in such a way that information about an object enclosed in the medium can be obtained by measuring and analyzing a reflected detection signal of the radar sensor (column 1 lines 43-47), and an additional sensor for generating a second detection signal for obtaining information about the object enclosed in the medium (column 1 lines 65-67 and column 2 lines 1-3).

**As to Claim 19**, Wollny discloses the radar device being a hand held short range radar for determining a location of the object enclosed in the medium (column 3 lines 26-27 and column 2 lines 48-57).

**As to Claim 20**, Wollny discloses the additional sensor being an inductive sensor (column 2 lines 22-25).

**As to Claim 25**, Wollny discloses a housing in to which the radar sensor and the additional sensor are integrated (column 2 lines 1-3).

**As to Claim 29**, Wollny discloses receiving reflected radar signals for analysis (column 2 lines 49-57). It is inherent in the operation of this type of radar system that objects be detected by transmitting a radar signal and carrying out analysis on the reflected radar signal in order to measure an object.

**As to Claim 32**, Wollny discloses the additional sensor being an inductive sensor and generating an additional detection signal (column 2 lines 22-25).

**As to Claim 36**, Wollny discloses measuring and analyzing a plurality of detection signals (column 1 lines 65-67 and column 2 line 1), the sensors originating from a group of sensors including an inductive sensor (column 2 lines 22-25).

**As to Claim 37**, Wollny discloses the detection signal of a sensor being optimized by measuring and analyzing an additional detection signal (column 3 lines 33-36).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 21-24, 26, 27, 30, 31, 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wollny (US 5680048).

**As to Claims 21, 22, 30, and 31**, capacitive sensors for detecting objects enclosed in a medium are well known in the art. It would have been obvious to modify Wollny, such that the additional sensor was a capacitive sensor, as it would cause no new or unexpected results.

**As to Claims 23 and 24**, infrared sensors for detecting objects enclosed in a medium are well known in the art. It would have been obvious to modify Wollny, such that the additional sensor was an infrared sensor, as it would cause no new or unexpected results.

**As to Claim 26**, Wollny discloses the radiating elements being situated on a printed circuit board, but does not explicitly disclose the radar sensors and the additional sensor being both situated on the printed circuit board. However, manufacture of sensor components on printed circuit boards is well known within the art. It would have been obvious to modify Wollny such that both the radar sensor and the additional sensor were situated on the same printed circuit board as it would cause no new or unexpected results.

**As to Claim 27**, Wollny discloses the radar sensor being advantageously implemented over a multitude of frequency bands (column 5 lines 29-40). Though Wollny does not explicitly disclose the radar sensor being of the wideband pulse variety, wide band pulse radar sensors are well known in the art. It would have been obvious to modify Wollny such that the radar sensor was a wide band pulse radar sensor as it would cause no new or unexpected results.

**As to Claim 33-35**, Wollny does not explicitly disclose the time operating parameters for measurement of the first detection signal and the second detection signal. However, time operating parameters for measurement of signals simultaneously, quasi-simultaneously, and sequentially are well known, and would be obvious to try, as they would cause no new or unexpected results.

***Conclusion***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter M. Bythrow whose telephone number is (571)270-1468. The examiner can normally be reached on Mon-Fri, 8AM-5:30PM, Alt Fri, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas H. Tarcza can be reached on 571-272-6979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Peter Bythrow  
Examiner  
Art unit 3662

/Thomas H. Tarcza/  
Supervisory Patent Examiner, Art Unit 3662